

(IWM - 12)

Furrow Irrigation Water Management

Transpiration

Consumptive
Use:
0.05 - 0.3"/day

Irrigation Water

Gpm or cfs
&
Ac.-in.
applied

Stratified
Soils?

Evaporation

Irrigate when
40-50% of the
"Available
Water" is
depleted in
the 0-12" root
zone.

Only about
15-30% of the
"Available
Water" is
depleted in
the 12-24" root
zone.

To maintain
salt balance

Leaching
Requirement

40% H₂O extraction

30% H₂O extraction

20% H₂O extraction

10% H₂O extraction

Field
Capacity is
reached w/in
24 - 48 hr.
for most soils

The water content below
the root zone is at
"Field Capacity" for
many flood irrigated soils

IMPORTANT CONSIDERATIONS:

- Solar radiation
- Wind
- Humidity
- Air Temperature
- Precipitation
- Root zone depth
- Canopy Development
- Surface Wetness
- Water holding capacity
- Soil Water Content
- Crop variety
- Soil drainage
- Irrigation efficiency
- Water quality (EC_{iw} & SAR)

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